



First Nations Health Authority
Health through wellness

Wildfire Smoke and Clean Air Shelters

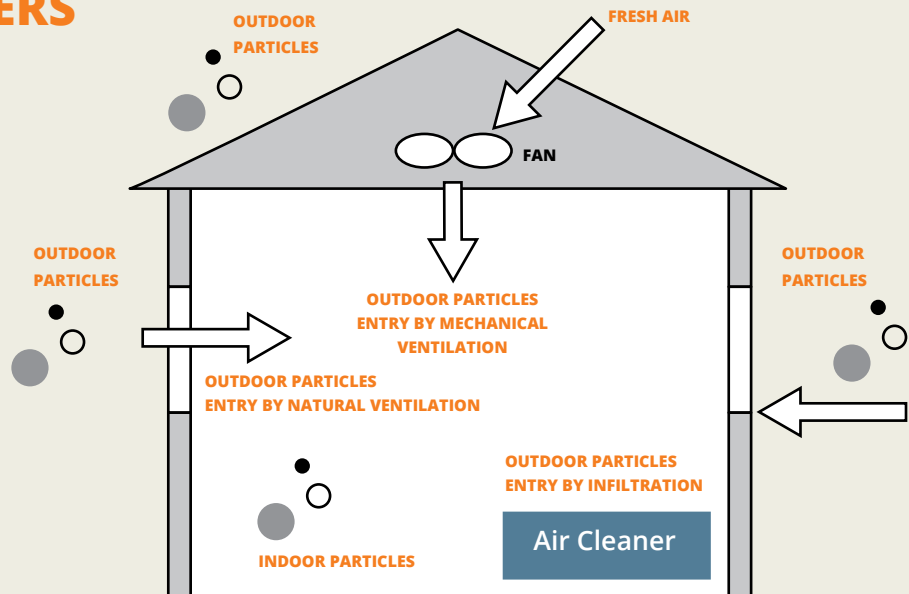
Wildfire smoke can have additional health risks for vulnerable populations or create irritating symptoms in healthy individuals. Staying indoors is recommended during smoke events to reduce exposure. Creating a clean air shelter can help. If your area is regularly impacted by smoke, plan your clean air shelters before the smoke season so that you are prepared.

Clean air shelters are areas, rooms or buildings that have a filtration system that reduces the amount of particulates generated by wildfire smoke. The objective, as in the image below, is to limit outdoor air entering the home, avoid creating indoor air pollutants, and filtering indoor air.

There are no specific standards or air quality measurements for clean air shelters. A review of science-based literature has shown that central air units are effective at reducing particulate materials/matter.

CLEAN AIR SHELTERS

- Limit infiltration from outdoors
- Limit indoor air pollution
- Clean indoor air (existing central air, HEPA, electrostatic precipitator)



A HOME CLEAN AIR SHELTER provides your home, or a room in your home, with filtration to reduce smoke exposure.

- Close all windows and doors.
- Seal cracks around doors and windows.
- Turn off exhaust fans, window air conditioners or other external vents.
- A central air system or air conditioning system can be used.
- Turn the fresh-air intake off and set to recirculate.
- A high efficiency particulate air (HEPA) filter is best; however conventional filters will lower particulate matter levels to a lesser degree.
- Portable air cleaners (HEPA or electrostatic air filters) can be very effective at reducing smoke particles. Be sure that the unit is appropriately sized for the room.
- Avoid creating other air pollution (e.g., smoking, burning candles, gas and wood stoves, and certain cleaning products). Avoid vacuuming which can stir up dust.
- During heat events, air conditioning may be needed to keep the home cool and reduce heat stress.
- During periods when smoke clears, open windows and doors to provide fresh air into the home.

If you do not have a central air system or access to a portable air cleaner, taking the steps above to limit smoke entering the home will still help to reduce smoke levels in the home. Ground floor or basement levels tend to be cooler and may be less impacted by smoke.

Portable air cleaners should meet these standards:

- Designated as HEPA or electrostatic precipitator
- CADR rated for tobacco smoke
- Sized for the room it will be used in

A COMMUNITY CLEAN AIR SHELTER is a building, or area of a building, with filtration to help reduce smoke exposure. It can provide temporary relief for community members during smoke events.

- Buildings such as band halls or schools, shopping malls, libraries or community centres usually have appropriate cooling and air filtration equipment.
- Conventional filters provide some reduction in particulate levels.
- Consider installing HEPA filters in long-term care or Elders facilities, child care centres and schools to reduce exposure for these more vulnerable populations.
- Confirm with a professional if the building system is suitable for a HEPA filter.
- Any modifications to building HVAC systems should be done by a professional.
- Consider giving vulnerable populations priority access to these areas.

Environmental Public Health Officers can work with communities to identify suitable community clean air shelters and provide advice on home clean air shelters.

*Consult with your Emergency Management Assistance Program (EMAP) Advisor for information regarding funding eligibility for the purchase of portable air cleaners for community settings. Portable air cleaners may also be considered eligible for placement in high-risk individual's homes on a **case-by-case basis**. *Adapted for ISC-AB region.